

Attorney Docket No. UM-06962

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chung Owyang

Serial No.:

10/087,345

03/01/02

Group No.:

1636

Examiner:

Sullivan

Filed: Entitled:

Orphanin FQ Receptor Nucleic Acids

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: February 27, 2004

Sir or Madam:

Enclosed please find an Information Disclosure Statement and Form PTO-1449, including copies of the references contained thereon, for filing in the U.S. Patent and Trademark Office.

A check for \$180.00 is also enclosed pursuant to 37 C.F.R. § 1.17(p) for filing this Information Disclosure Statement after three months as set forth in 37 C.F.R. § 1.97(c).

The Commissioner is hereby authorized to charge any additional fee or credit overpayment to our Deposit Account No. 08-1290. An originally executed duplicate of this transmittal is enclosed for this purpose.

Dated:

February 27, 2004

Tanya A. Arenson

Registration No. 47,391

03/02/2004 SSANDARA 00000024 10087345

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MEDLEN & CARROLL, LLP 101 Howard Street, Suite 350 San Francisco, California 94105

608/218-6900



UM-06962 February 27, 2004

IN THE CAPTED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Owyang et al.

Serial No.:

Group No.:

Filed:

Examiner:

Entitled:

ORPHANIN FQ RECEPTOR NUCLEIC

ACIDS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231, on February 27, 2004

By: ________

Mary Ellen Waite

Sir or Madam:

The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97. The Examiner is requested to make these citations of official record in this application.

The following printed publications are referred to in the body of the specification:

- 4,683,195;
- 4,683,202;
- 4,965,188;
- 4,946,778;
- 6,172,075;
- 5,976,807;

UM-06962 February 27, 2004

- 5,821,219;
- 4,873,191;
- 6,074,859;
- 5,976,796;
- 5,674,713;
- 5,223,409;
- 5,198,346;
- 5,096,815;
- 5,837,458;
- 5,830,721;
- 5,811,238;
- . 5,733,731;
- 4,657,760;
- 5,206,344;
- 5,225,212;
- 6,080,912;
- 5,614,396;
- WO 84/03564;
- WO 90/08832;
- PCT/US90/02545;
- WO 93/03367;
- Brownstein, Proc. Natl. Acad. Sci. USA 90:5391 [1993];
- DiChara and North, Trends in Pharmacol. Sci. 13:185 [1992];
- McKnight and Rees, Neurotransmissions 7:1 [1991]. This reference is not being supplied at this time, but if the Examiner requests it will be sent at that time.
- Wang et al., FEBS Lett. 348:75 [1994];
- Bunzow et al., FEBS Lett. 347:284 [1994];

UM-06962 February 27, 2004

- Darland et al., Trends Neurosci. 21:215 [1998];
- Mollereau et al., FEBS Lett. 341:33 [1994];
- Fukuda et al., FEBS Lett. 343:42 [1994];
- Chen et al., FEBS Lett. 347:279 [1994];
- Bunzow et al., FEBS Lett. 347:284 [1994];
- Wick et al., Brain Res. Mol. Brain Res. 27:37 [1994];
- Lachowicz et al., J. Neurochem. 64:34 [1995];
- Nishi et al., Biochem. Biophys. Res. Commun. 205:1353 [1994];
- Pan et al., Regul. Pept. 54:217 [1994];
- Pan et al., Mol. Pharmacol. 47:1180 [1995];
- Pan et al., Gene 171:255 [1996];
- Reinscheid et al., Science 270:792 [1995];
- Meunier et al., Nature 377:532 [1995];
- Zhang et al., Brain Res. 772:102 [1997];
- Yazdani et al., Gastroenterology 116:108 [1999];
- Osinski et al., Eur. J. Pharmacol. 365:281 [1999];
- Rossi et al., J. Pharmacol. Exp. Ther. 282:858 [1997];
- Rossi et al., Brain Res. 792:327 [1998];
- Noda et al., J. Biol. Chem. 273:18047 [1998];
- Mathis et al., Biochem. Biophys. Res. Commun. 230:462 [1997];
- Pan et al., FEBS Lett. 395:207 [1996];
- Yamamoto and Nozaki-Taguchi, Anesthesiology 87:1145 [1997];
- Blandizzi et al., Biochem. Biophys. Res. Commun. 202:947 [1994];
- Mount, Nucleic Acids Res. 10:459 [1982];
- Muraoka et al., Am. J. Physiol. 271:G1101 [1996];
- Song et al., Proc. Natl. Acad. Sci. U S A. 90:9085 [1993]
- Calo et al., Br. J. Pharmacol 129:1261 [2000];
- Jenck et al., PNAS 97:4938 [2000]; and

• Koster et al., PNAS 96:10444.

Applicants have become aware of the following printed publications which may be material to the examination of this application:

- U.S. Patent 5,837,809;
- U.S. Patent 5,929,035;.
- Allen et al., J. Neurosci., 19:2152 [1999];
- Meng et al., J. Biol. Chem., 275:21939 [2000];
- Takahashi et al., Gastroenterology 119:1054 [2000] (abstract only);
- Takahashi et al., Gastroenterology 119:71 [2000] (abstract only);
- Hashimoto et al., Neurosci. Lett. 278:109 [2000] (abstract only);
- Hom et al., Synapse 34:187 [1999] (abstract only);
- Goda and Mutneja, Curr. Biol., 8:R889 [1998] (abstract only);
- Guerrini et al., J. Med. Chem., 43:2805 [2000] (abstract only);
- Chiou, J. Biomed Sci. 7:232 [2000] (abstract only);
- Berger et al., J. Pharmacol. Exp. Ther. 294:428 [2000] (abstract only);

This Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Dated: February 27, 2004

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San Francisco, California 94105

608 218-6900

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U.S. Department of Commerce Patent and Trademark Office Attorney Docket No.: UM-06962

Serial No.: 10/087,345

INFORMATIO

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Applicant: Chung Owyang

(37 CFR § 1.98(b))

Filing Date: 03/01/02 Group Art Unit:

37 CFR 9 1.5	(0))	<u>. </u>		U.S. PATENT DOCUMENTS		Gloup Art on		
Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing	Date
	1	4,683,195	07/28/87	Mullis et al.	435	6	02/07	/86
	2	4,683,202	07/28/87	Mullis	435	91	10/25	/85
	3	4,965,188	10/23/90	Mullis et al.	435	6	06/17	/87
	4	4,946,778	08/07/90	Ladner et al.	435	69.6	01/19	/89
	5	6,172,075	01/09/01	Adam et al.	514	278	06/11	/99
	6	5,976,807	11/02/99	Horlick et al.	435	6	08/06	/98
	7	5,821,219	10/13/09	Grandy et al.	514	2	11/03	/95
	8	4,873,191	10/10/89	Wagner et al.	435	172.3	08/18	/86
	9	6,074,859	06/13/00	Hirokawa et al.	435	189	07/08	/98
	10	5,976,796	11/02/99	Szalay et al.	435	6	12/23	/96
	11	5,674,713	10/07/97	McElroy et al.	435	69.7	06/02	/95
	12	5,223,409	06/29/93	Ladner et al.	435	69.7	03/01	/91
	13	5,198,346	03/30/93	Ladner et al.	435	69.1	07/26	/90
	14	5,096,815	03/17/92	Ladner et al.	435	69.1	01/06	/89
	15	5,837,458	11/17/98	Minshull et al.	435	6	05/20/	/96
	16	5,830,721	11/03/98	Stemmer et al.	435	172.1	03/04	/96
	17	5,811,238	09/22/98	Stemmer et al.	435	6	11/30	/95
	18	5,733,731	03/31/98	Schatz et al.	435	6	10/26	/95
	19	4,657,760	04/14/87	Kung et al.	424	85	03/04/	/85
	20	5,206,344	04/27/93	Katre et al.	530	351	01/11/	/88
	21	5,225,212	07/06/93	Martin et al.	424	450	12/10/	/90
	22	6,080,912	06/27/00	Bremel et al.	800	23	03/20/	/97
	23	5,614,396	03/25/97	Bradley et al.	435	172.3	02/22/	/94
	24	5,837,809	11/17/98	Grandy et al.	530	326	08/11/	/95
	25	5,929,035	07/27/99	Owyang	514	13	04/14/	/98
		FO	REIGN PATENTS C	R PUBLISHED FOREIGN PATENT APPLIC	ATIONS			
		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation Yes No	
	26	WO 84/03564		PCT		•	100	14
	27	WO 90/08832		PCT				
	28	PCT/US90/02545		PCT				
``	29	WO 93/03367		PCT				
aminer:		•		Date Considered:		1	<u>_</u>	

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. Department of Commerce Patent and Trademark Office

Attorney Docket No.: UM-06962

Serial No.: 10/087,345

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DISCLOSURE STATEMENT BY APPLICANT Several States of Necessary)

Applicant: Chung Owyang

(37 CFR § 1.98(b))	TANKE IN NECESSARY)	Filing Date: 03/01/02	Group Art Unit:			
	OTHER DOCUMENTS (Including Author, Title, D	ate, Relevant Pages, Place of Publication)				
30	Brownstein, Proc. Natl. Acad. Sci. USA 90:5391 [1993]					
31	31 DiChara and North, Trends in Pharmacol. Sci. 13:185 [1992]					
32	McKnight and Rees, Neurotransmissions 7:1 [1991]. This reference is not being supplied at this time but if the Examiner requests sent in at that time.					
33	Wang et al., FEBS Lett. 348:75 [1994];					
34	Bunzow et al., FEBS Lett. 347:284 [1994];					
35	35 Darland et al., Trends Neurosci. 21:215 [1998]; 36 Mollereau et al., FEBS Lett. 341:33 [1994];					
36						
37 Fukuda et al., FEBS Lett. 343:42 [1994] 38 Chen et al., FEBS Lett. 347:279 [1994];						
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40 Wick et al., Brain Res. Mol. Brain Res. 27:37 [1994];						
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41 Lachowicz et al., J. Neurochem. 64:34 [1995]; 42 Nishi et al., Biochem. Biophys. Res. Commun. 205:1353 [1994]						
43 .	43 . Pan et al., Regul. Pept. 54:217 [1994]					
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45	44 Pan et al., Mol. Pharmacol. 47:1180 [1995]; 45 Pan et al., Gene 171:255 [1996];					
46	Reinscheid et al., Science 270:792 [1995];					
47	Meunier et al., Nature 377:532 [1995];					
48	Zhang et al., Brain Res. 772:102 [1997]					
49	Yazdani et al., Gastroenterology 116:108 [1999];					
50	Osinski et al., Eur. J. Pharmacol. 365:281 [1999];					
51	Rossi et al., J. Pharmacol. Exp. Ther. 282:858 [1997];					
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52 Rossi et al., Brain Res. 792:327 [1998]; 53 Noda et al., J. Biol. Chem. 273:18047 [1998]						
54	Pan et al., FEBS Lett. 395:207 [1996];					
55 Mathis et al., Biochem. Biophys. Res. Commun. 230:462 [1997]; 56 Yamamoto and Nozaki-Taguchi, Anesthesiology 87:1145 [1997];						
				57	Blandizzi et al., Biochem. Biophys. Res. Commun. 202:947 [1	994]
. 58						
59	Muraoka et al., Am. J. Physiol. 271:G1101 [1996];					
Examiner:		Date Considered:				
EXAMINER: Ini	tial citation considered. Draw line through citation if not in conf th nelxt communication to applicant.	formance and not considered. Include copy	y of this form			

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INFORMATION

OSURE STATEMENT BY APPLICANT veral Sheets (Necessary)

Applicant: Chung Owyang

37 CFR § 1.98(b))	RADEN	Filing Date: 03/01/02	Group Art Unit:				
	OTHER DOCUMENTS (Including Author, Title, D	ate, Relevant Pages, Place of Publication)					
60	Song et al., Proc. Natl. Acad. Sci. U S A. 90:9085 [1993]						
61	Calo et al., Br. J. Pharmacol 129:1261 [2000];						
62	Jenck et al., PNAS 97:4938 [2000]						
63	Koster et al., PNAS 96:10444.						
64	Allen et al., J. Neurosci., 19:2152 [1999]						
65	Meng et al., J. Biol. Chem., 275:21939 [2000]						
66	Takahashi et al., Gastroenterology 119:1054 [2000]						
67	Takahashi et al., Gastroenterology 119:71 [2000] (abstract only)						
68	Hashimoto et al., Neurosci. Lett. 278:109 [2000] (abstract only)						
69	Hom et al., Synapse 34:187 [1999] (abstract only)						
70	Goda and Mutneja, Curr. Biol., 8:R889 [1998] (abstract only)	·					
71	Guerrini et al., J. Med. Chem., 43:2805 [2000] (abstract only)						
72	Chiou, J. Biomed Sci. 7:232 [2000] (abstract only)						
73	Berger et al., J. Pharmacol. Exp. Ther. 294:428 [2000] (abstra	ct only)					
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